

PART Regulation 3

Ambient Air Quality Standards

REGULATION 3.01 ~~Purpose of Ambient Air Quality Standards and Expression of Non-Degradation Intention~~

**Air Pollution Control District of Jefferson County
Jefferson County, Kentucky**

Relates To: KRS Chapter 77 Air Pollution Control

Pursuant To: KRS Chapter 77 Air Pollution Control

Necessity And Function: KRS 77.180 ~~authorizes~~ ~~provides that~~ the Air Pollution Control Board ~~to adopt may make~~ and enforce all ~~needful~~ orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation ~~establishes~~ ~~states the purpose of~~ District ambient air quality standards, the methods for measuring air contaminants, and the ~~an~~ expression of non-degradation intention of the ~~Air Pollution Control Board~~ to prohibit further significant and avoidable deterioration of air quality.

SECTION 1 Definitions

Terms used in this regulation that are not defined in this regulation shall have the meaning given them in Regulation 1.02 *Definitions*

SECTION 21 Purpose

The purpose of an ambient air quality standards is to establish a concentration, including a time-averaging interval over which that concentration is measured, for a particular air contaminant ~~mean those levels of air quality that which~~ the Board determines is ~~judges are~~ necessary, with an adequate margin of safety, to protect the public health and welfare from any known or anticipated adverse effects of that air contaminant ~~pollution~~. Such standards are subject to revision, and additional standards may be promulgated as the Board deems necessary to protect the public health and welfare.

SECTION 32 Non-degradation Intention

In ~~establishing an ambient air quality~~ the establishment of these standards, it is the intention of the Board to prohibit further significant and avoidable deterioration of air quality in areas where the air quality is presently ~~exists which is~~ numerically equal to or ~~is~~ better than the standards ~~expressed herein~~.

SECTION 43 General Prohibition

~~A No~~ person shall not cause or allow the emission of an air contaminant that would violate, or interfere with the attainment or maintenance of, an ambient air quality standards ~~as specified in this regulation~~.

[If adopted, this would amend the June 13, 1979, version of Regulation 3.01]

[Approved by the Committee of the Whole on January 13, 2005, for Public Review]

[Changes to Draft #2 (the proposed regulation) are redlined and double underlined]

SECTION 5 Ambient Air Quality Standards

	Air Contaminant	Primary Standards	Averaging Times	Secondary Standards
36	5.1	Carbon Monoxide		
37	5.1.1	9 ppm (10 mg/m ³)	8-hour ¹	None
38	5.1.2	35 ppm (40 mg/m ³)	1-hour ¹	None
39	5.2	Lead	1.5 µg/m ³	Quarterly Average
40	5.3	Nitrogen Dioxide	0.053 ppm (100 µg/m ³)	Annual (Arithmetic Mean)
41	5.4	Particulate Matter		
42	5.4.1	(PM ₁₀)	50 µg/m ³	Annual ² (Arithmetic Mean)
43	5.4.2		150 µg/m ³	24-hour ^{7±}
44	5.5	Particulate Matter		
45	5.5.1	(PM _{2.5})	15 µg/m ³	Annual ³ (Arithmetic Mean)
46	5.5.2		65 µg/m ³	24-hour ⁴
47	5.6	Ozone		
48	5.6.1		0.08 ppm	8-hour ⁵
49	5.6.2		0.12 ppm	1-hour ⁶
50	5.7	Sulfur Oxides		
51	5.7.1		0.03 ppm	Annual (Arithmetic Mean)
52	5.7.2		0.14 ppm	24-hour ¹
53	5.7.3			3-hour ¹
				0.5 ppm (1300 µg/m ³)
54	<u>5.8</u>	<u>Hydrogen Sulfide</u>	<u>Maximum 1-hour average</u>	<u>14 µg/m³ ¹</u>

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	Air Contaminant	Primary Standards	Averaging Times	Secondary Standards
55	<u>5.9</u>	<u>Gaseous Fluorides</u>		
56	<u>5.9.1</u>	(expressed as HF)	<u>400 µg/m³</u>	<u>Annual arithmetic mean</u>
57	<u>5.9.2</u>		<u>Maximum 1-month average.</u>	<u>0.82 µg/m³</u>
58	<u>5.9.3</u>		<u>Maximum 1-week average.</u>	<u>1.64 µg/m³</u>
59	<u>5.9.4</u>	<u>800 µg/m³</u>	<u>Maximum 24-hour average</u>	<u>2.86 µg/m³</u>
60	<u>5.9.5</u>		<u>Maximum 12-hour average</u>	<u>3.68 µg/m³</u>
61	<u>5.10</u>	<u>Total Fluorides⁸</u>		
62	<u>5.10.1</u>		<u>Growing season⁹</u>	<u>40 ppm (w/w)</u>
63	<u>5.10.2</u>		<u>Two-month ave.</u>	<u>60 ppm (w/w)</u>
64	<u>5.10.3</u>		<u>One-month ave.</u>	<u>80 ppm (w/w)</u>

1 Not to be exceeded more than once per year.

2 To attain this standard, the expected annual arithmetic mean PM₁₀ concentration at each monitor within an area must not exceed 50 µg/m³.

3 To attain this standard, the 3-year average of the annual arithmetic mean PM_{2.5} concentrations from single or multiple community-oriented monitors must not exceed 15 µg/m³.

4 To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 65 µg/m³.

5 To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.

6 The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is ≤ 1, as determined by 40 CFR Part 50 Appendix H. The 1-hour ozone standard shall be in effect until June 15, 2005.

7 To attain this standard, the 3-year average of the annual 99th percentile values at each monitoring site must not exceed 150 µg/m³.

8 Dry weight basis (as fluoride ion) in and on forage for consumption by grazing ruminants.

9 Average concentration of monthly samples over growing season (not to exceed 6 consecutive months)

83 **SECTION 6 Applicability of Ambient Air Quality Standards**

84 The ambient air quality standards shall apply, be achieved, and maintained in Jefferson County,
85 Kentucky.

86 **SECTION 7 Methods of Measurement**

87 The air contaminants listed in sections 5.1 to 5.7 shall be measured by the reference or equivalent
88 methods and at the frequency specified in EPA regulations on Ambient Air Quality Surveillance
89 (40 CFR Parts 50, 53, and 58).

90 **SECTION 8 Savings Clause**

91 Any emission standard established pursuant to Regulation 3.04 *Ambient Air Quality Standards*
92 section 1.7, 2.7, 2.8, or 2.9 that is reflected in a permit condition as of [insert the effective date of
93 Version 4 of this regulation] shall remain in effect until replaced with an emission standard
94 established pursuant to Regulation 5.21.

95 Adopted v1/4-19-72; effective 4-19-72; amended v2/9-1-76, v3/6-13-79.